APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,932	05/08/2006	Yonggang Du	CN03 0039 US1	4497

24737   7590   08/14/2009
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER
BATISTA, MARCOS

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
08/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/578,932	DU ET AL.
Office Action Summary	Examiner	Art Unit	
	MARCOS BATISTA	2617	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 June 2009</u>.
2a)☐ This action is **FINAL.** 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-20</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This Action is in response to Applicant's amendment filed on 06/01/2009. Claims 1-20

are still pending in the present application. This Action is made **NON-FINAL.**

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 06/01/2009 has been entered.

Response to Arguments

3.   Applicant's arguments with respect to claims 1, 7, 12 and 17 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

> 1.   Determining the scope and contents of the prior art.
> 2.   Ascertaining the differences between the prior art and the claims at issue.
> 3.   Resolving the level of ordinary skill in the pertinent art.

      4.   Considering objective evidence present in the application indicating obviousness
            or nonobviousness.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.   Claims 1, 7-9, 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Sundar et al. (US 20030134650 A1), hereafter "Sundar," in view of Benchetrit al. (US

20030065817 A1), hereafter "Benchetritet," further in view of Jones et al. (US 7010300 B1),

hereafter "Jones."

      Consider claim 1, Sundar discloses a communication method performed by a WWAN

network system for a mobile terminal with a WWAN address in the WWAN to bilaterally switch

communication between the WWAN and a WLAN via a mobility

supporting module suitable to use with a mobility control module, the method comprising (**see**

fig. 5, par. 0065): receiving a registration report sent by the mobile terminal when the mobile

terminal enters the WLAN, wherein the registration report at least contains a WLAN address that

the mobile terminal acquires when entering the WLAN (**see fig. 15, par. 0077 – the SIP**

message, which are exchanged between the different networks, contains IP addresses

related information).

      Sundar discloses claim 1 above, but does not particular refer to establishing mapping

relationship between the WWAN address and the WLAN address of the mobile terminal.

      Benchetritet, in analogous art, teaches establishing mapping relationship between the

WWAN address and the WLAN address of the mobile terminal (**see figs. 5 and 7, pars. 0021**

lines 1-7, 0076 lines 17-20).

      It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Sundar and have it include establishing mapping

relationship between the WWAN address and the WLAN address of the mobile terminal, as

taught by Benchetritet. The motivation would have been for establishing a plurality of network

links between a private network and a public network (**see par. 0023**).

      Sundar as modified by Benchetritet discloses claim 1 above, but does not particular refer

to wherein the mobility supporting module may switch between the WWAN and WLAN by

providing updated WWAN and WLAN address information via one or more encapsulating

techniques.

      Jones, in analogous art, teaches wherein the mobility supporting module may switch

between the WWAN and WLAN by providing updated WWAN and WLAN address information

via one or more encapsulating techniques (**see fig. 4, col. 26 lines 5-16, col. 35 lines 29-65 and**

col. 36 lines 12-34 – Jones teaches encapsulating the protocol data from performing a handoff

between a public network (i. e., WWAN) and a Private network (i. e., WLAN)).

      It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Sundar as modified by Benchetritet and have it

include wherein the mobility supporting module may switch between the WWAN and WLAN by

providing updated WWAN and WLAN address information via one or more encapsulating

techniques, as taught by Jones. The motivation would have been to transparently handover a

current session between the WLAN and the WWAN independently of the protocol being used

(**see fig. 4, col. 4 lines 28-42**).

Consider claim 7, Sundar discloses a communication method performed by a mobile

terminal with a WWAN address, for the mobile terminal to bilaterally switch communication

between the WWAN and a WLAN via a mobility supporting module suitable to use with a

mobility control module, the method comprising acquiring a WLAN address when entering the

WLAN (**see fig. 15, par. 0077**); sending a registration report to the WWAN network system,

wherein the registration report at least contains the WLAN address (**see fig. 15, par. 0077**).

Sundar, however, does not particular refer to wherein the WWAN network system

establishes a mapping relationship between the WWAN address and the WLAN address of the

mobile terminal according to the registration report.

Benchetritet, in analogous art, teaches establishes a mapping relationship between the

WWAN address and the WLAN address of the mobile terminal (**see figs. 5 and 7, pars. 0021

lines 1-7, 0076 lines 17-20**).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Sundar and have it include establishing mapping

relationship between the WWAN address and the WLAN address of the mobile terminal, as

taught by Benchetritet. The motivation would have been for establishing a plurality of network

links between a private network and a public network (see par. 0023).

Sundar as modified by Benchetritet discloses claim 1 above, but does not particular refer

wherein the mobility supporting module may switch between the WWAN and WLAN by

providing updated WWAN and WLAN address information via one or more encapsulating

techniques.

Jones, in analogous art, teaches wherein the mobility supporting module may switch

between the WWAN and WLAN by providing updated WWAN and WLAN address information

via one or more encapsulating techniques **(see fig. 4, col. 26 lines 5-16, col. 35 lines 29-65 and**

col. 36 lines 12-34 – Jones teaches encapsulating the protocol data from performing a handoff

between a public network (i. e., WWAN) and a Private network (i. e., WLAN)).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Sundar as modified by Benchetritet and have it

include wherein the mobility supporting module may switch between the WWAN and WLAN by

providing updated WWAN and WLAN address information via one or more encapsulating

techniques, as taught by Jones. The motivation would have been to transparently handover a

current session between the WLAN and the WWAN independently of the protocol being used

(see fig. 4, col. 4 lines 28-42).

Consider claim 8, Sundar as modified by Benchetritet and Jones discloses claim 7 above.

Sunday also discloses sending a report for canceling registration to said WWAN network system

so as to notify said WWAN network system that said WLAN address of the mobile terminal is

invalid when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11).

Consider claim 9, Sundar as modified by Benchetritet and Jones discloses claim 8 above. Sundar also discloses wherein said registration report and said report for canceling registration can be transferred to said network system via one of WWAN link and WLAN link (see fig. 9, par. 0071 lines 1-11).

Consider claim 12, this is an apparatus claim corresponding to method claim 1. Therefore, it has been analyzed and rejected based upon the method claim 1 above.

Consider claim 17, this is an apparatus claim corresponding to method claim 1. Therefore, it has been analyzed and rejected based upon the method claim 1 above.

Consider claim 18, Sundar as modified by Benchetritet and Jones teaches claim 17 above. Sundar also teaches wherein: said sending unit sends a report for canceling registration to said WWAN network system to notify said WWAN network system that said WLAN address of the mobile terminal is invalid when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11).

6.   Claims 2-6, 13-16, 10,11, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US 20030134650 A1), hereafter "Sundar," in view of Benchetritet al. (US 20030065817 A1), hereafter "Benchetritet," in view of Jones et al. (US 7010300 B1), hereafter "Jones," further in view of Chiueh et al. (US 20050053034 A1), hereafter "Chiueh."

Consider claim 2, Sundar as modified by Benchetritet and Jones teaches claim 1 above. Sundar also teaches receiving the data information to be sent to said mobile terminal from a source address (see par. 0093 lines 12-20); sending the data information containing said WLAN address to said mobile terminal via said WLAN (see fig. 22, par. 0083).

Sundar as modified by Benchetritet and Jones, does not particular refer to encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address.

Chiueh, in analogous art, teaches encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address (see par. 0056 lines 10-23).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar as modified by Benchetritet and Jones and have it include encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address, as taught by Chiueh. The motivation would have been in order to. The motivation would have been in order to provide seamless routing capability when moving across different networks (see par. 0056).

Consider claim 3, Sundar as modified by Benchetritet and Jones teaches claim 1 above. Sundar also teaches receiving the data information containing said WLAN address sent by said mobile terminal to a destination address via said WLAN (see par. 0078).

Sundar as modified by Benchetritet and Jones, does not particular refer to unpacking the

data information containing said WLAN address and sending the unpacked data information to

the destination address.

Chiueh, in analogous art, teaches unpacking the data information containing said WLAN

address and sending the unpacked data information to the destination address (see par. 0065).

The motivation would have been in order to provide seamless routing capability when moving

across different networks (see par. 0065).

Consider claim 4, Sundar as modified by Benchetritet, Jones and Chiueh teaches claim 3

above. Sundar also teaches receiving a report for canceling registration sent by said mobile

terminal when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11); deleting

the mapping relationship between said WWAN address and said WLAN address of said mobile

terminal in the network system according to said report for canceling registration (see fig. 9, par.

0071 lines 14-21 – clean-up and de-registration refer to deleting the configuration related to the

previous connection).

Consider claim 5, Sundar as modified by Benchetritet, Jones and Chiueh teaches claim 3

above. Chiueh also teaches receiving a registration report sent by said mobile terminal when said

mobile terminal enters another WLAN, wherein the registration report at least contains another

WLAN address said mobile terminal acquires when said mobile terminal enters the another

WLAN (see par. 0056 lines 1-8); updating the mapping relationship between said WWAN

address and said WLAN address of said mobile terminal to the mapping relationship between

said WWAN address and the another WLAN address according to said registration report (see

par. 0080 lines 20-27). The motivation would have been in order to provide seamless routing

capability when moving across different networks (see pars. 0056 and 0080).

Consider claim 6, Sundar as modified by Benchetritet, Jones and Chiueh teaches claim 4

above. Sundar also teaches wherein said registration report and said report for canceling

registration can be transferred to the network system via either WWAN link or a WLAN link

(see fig. 9, par. 0071 lines 1-11).

Consider claim 10, Sundar as modified by Benchetritet and Jones discloses claim 9

above. Sundar as modified by Benchetritet does not particular refer to receiving the data

information containing said WLAN address transferred via said

WWAN network system from a source address, wherein said WLAN address is encapsulated in

the data information by said WWAN network system; unpacking the received data information

so as to get the data information from the source address.

Chiueh, in analogous art, teaches receiving the data information containing said WLAN

address transferred via said WWAN network system from a source address, wherein said WLAN

address is encapsulated in the data information by said WWAN network system (see par. 0056

lines 10-23); unpacking the received data information so as to get the data information from the

source address (see par. 0065). The motivation would have been in order to provide seamless

routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claim 11, Sundar as modified by Benchetritet, Jones and Chiueh teaches claim

10 above. Chiueh also teaches encapsulating said WLAN address into the data information to be sent to a destination address (see par. 0056 lines 10-23); sending the data information containing said WLAN address to said WWAN network system, so as to send the data information unpacked by said WWAN network system to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claims 13-16, these are system claims corresponding to method claims 2-5. Therefore, they have been analyzed and rejected based upon the method claims 2-5 respectively.

Consider claim 19, Sundar as modified by Benchetritet and Jones teaches claim 18 above. Sundar as modified by Benchetritet and Jones does not particular refer to wherein: said receiving unit receives the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system; an unpacking unit unpacks the received data information to get the data information from the source address.

Chiueh, in analogous art, teaches wherein: said receiving unit receives the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system (see par. 0056 lines 10-23); a unpacking unit unpacks the received data information to get the data information from the source address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different

networks (see pars. 0056 and 0065).

Consider claim 20, Sundar as modified by Benchetritet, Jones and Chiueh teaches claim 19 above. Chiueh also teaches an encapsulating unit, for encapsulating said WLAN address into the data information to be sent to a destination address (see par. 0056 lines 10-23); said sending unit sends the data information containing said WLAN address to said WWAN network system, so as to send the data information unpacked by said WWAN network system to the destination address (see par. 0065).The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-

3028.

     Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Marcos Batista/
Examiner

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617

07/29/2009